

FILE 'REGISTRY' ENTERED AT 16:03:24 ON 08 FEB 2010
EXP 1-KESTOSE/CN
L1 1 S E3
EXP NYSTOSE/CN
L2 1 S E3
EXP 1F-BETA-FRUCTOFURANOSYLNYSTOSE/CN
L3 1 S E4

FILE 'HCAPLUS' ENTERED AT 16:04:18 ON 08 FEB 2010
L4 671 S L1-L3
L5 128 S L1 AND L2 AND L3
L6 1690 S KIBBLE OR ((PET OR DOG OR CAT OR CANINE OR FELINE) (W)FOOD)
L7 0 S L5 AND L6
L8 785512 S FOOD OR NUTRITION OR DIETARY
L9 27 S L5 AND L8
L10 20 S L9 AND (PY<2004 OR AY<2004 OR PRY<2004)

| | | | |
|----------------------|--|------------|---------|
| => file registry | | | |
| COST IN U.S. DOLLARS | | SINCE FILE | TOTAL |
| | | ENTRY | SESSION |
| FULL ESTIMATED COST | | 0.22 | 0.22 |

FILE 'REGISTRY' ENTERED AT 16:03:24 ON 08 FEB 2010
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2010 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 FEB 2010 HIGHEST RN 1204734-34-8
 DICTIONARY FILE UPDATES: 7 FEB 2010 HIGHEST RN 1204734-34-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

```
=> exp 1-kestose/cn
E1      1      1-KESTOHEPTAOSE/CN
E2      1      1-KESTOPENTAOSE/CN
E3      1 --> 1-KESTOSE/CN
E4      1      1-KESTOSE-SUCROSE FRUCTOSYLTRANSFERASE/CN
E5      1      1-KESTOTRIOSE/CN
E6      1      1-KETO PREVITAMIN D3/CN
E7      1      1-KETO-A-CYPERONE/CN
E8      1      1-KETO-1,2-DIHYDROISOQUINOLINE PHENYLHYDRAZONE/CN
E9      1      1-KETO-2,3-EPOXYCHLORDENE/CN
E10     1      1-KETO-25-HYDROXYPREVITAMIN D3/CN
E11     1      1-KETO-3-(3'-SULFAMIL-4'-CHLOROPHENYL)-3-HYDROXYISOINDOLINE/
CN
E12     1      1-KETO-3-METHYL-3-CARBOMETHOXYTETRAHYDROISOQUINOLINE/CN
```

```
=> s e3
L1      1 1-KESTOSE/CN
```

```
=> exp nystose/cn
E1      1      NYSTEX/CN
E2      1      NYSTOP/CN
E3      1 --> NYSTOSE/CN
E4      1      NYSTOSE TRIHYDRATE/CN
E5      1      NYSTRANOL/CN
E6      1      NYSYN 25-8/CN
E7      1      NYSYN 30-5/CN
E8      1      NYSYN 33-3/CN
E9      1      NYSYN 33-5/CN
E10     1      NYSYN 33-5HM/CN
E11     1      NYSYN 35-5/CN
E12     1      NYSYN 35-8/CN
```

```
=> s e3
L2          1 NYSTOSE/CN

=> exp 1F-beta-fructofuranosylnystose/cn
E1          1 1F-B-D-FRUCTOFURANOSYL-6G(1-B-D-FRUCTOFURANOSYL)2
           SUCROSE/CN
E2          1 1F-B-D-FRUCTOFURANOSYL-6G(1-B-D-FRUCTOFURANOSYL)3
           SUCROSE/CN
E3          0 --> 1F-BETA-FRUCTOFURANOSYLNYSTOSE/CN
E4          1 1F-FRUCTOFURANOSYLNYSTOSE/CN
E5          1 1F-FRUCTOSYLSUCROSE/CN
E6          1 1F-FRUCTOSYLTRANSFERASE/CN
E7          1 1F1/CN
E8          1 1F2TM55/CN
E9          1 1F5/CN
E10         1 1F538/CN
E11         1 1F7/CN
E12         1 1F7 ANTIGENS/CN
```

```
=> s e4
L3          1 1F-FRUCTOFURANOSYLNYSTOSE/CN
```

```
=> file hcaplus
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                               ENTRY          SESSION
FULL ESTIMATED COST          17.48          17.70
```

```
FILE 'HCAPLUS' ENTERED AT 16:04:18 ON 08 FEB 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)
```

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 8 Feb 2010 VOL 152 ISS 7
FILE LAST UPDATED: 7 Feb 2010 (20100207/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s 11-13
      529 L1
```

421 L2
182 L3
L4 671 (L1 OR L2 OR L3)

=> s 11 and 12 and 13
529 L1
421 L2
182 L3
L5 128 L1 AND L2 AND L3

=> s kibble or ((pet or dog or cat or canine or feline) (w)food)
329 KIBBLE
87858 PET
74233 DOG
57530 CAT
32341 CANINE
7466 FELINE
498071 FOOD
1370 (PET OR DOG OR CAT OR CANINE OR FELINE) (W)FOOD
L6 1690 KIBBLE OR ((PET OR DOG OR CAT OR CANINE OR FELINE) (W)FOOD)

=> s 15 and 16
L7 0 L5 AND L6

=> s food or nutrition or dietary
498071 FOOD
195688 NUTRITION
202089 DIETARY
L8 785512 FOOD OR NUTRITION OR DIETARY

=> s 15 and 18
L9 27 L5 AND L8

=> s 19 and (PY<2004 or AY<2004 or PRY<2004)
24050346 PY<2004
4826142 AY<2004
4299615 PRY<2004
L10 20 L9 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> d 110 1-20 ti abs bib

L10 ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Matrix-forming composition containing pectin
AB A liquid edible composition with a pH >6, a viscosity <600 mPa s at a shear rate
of 100 s⁻¹ and 20°, and a viscosity ≥125% of the viscosity at pH <5 and 37° comprises ≥0.05 weight% pectin (degree of methoxylation 2-50) and/or alginate; ≥5 mg calcium per 100 mL; and ≥0.1 weight% indigestible oligosaccharide (degree of polymerization 2-60). Oral administration of the product may be used to treat or prevent obesity in mammals. Thus, a viscous dietetic food composition (100 mL, pH 7) may include 0.55 g low-methoxyl pectin, 154 mg calcium carbonate, 0.4 g tripotassium citrate, and 1 g Fibersol 2.

AN 2008:1088763 HCAPLUS <>LOGINID::20100208>>
DN 149:331171
TI Matrix-forming composition containing pectin
IN Navarro Y Koren, Peter Antonio; Van Laere, Katrien Maria Jozefa; De Lange, Maria Elisabeth Hermien; Minor, Marcel
PA N.V. Nutricia, Neth.
SO U.S., 12pp.
CODEN: USXXAM

DT Patent
 LA English
 FAN.CNT 5

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|--------------|
| PI | US 7422764 | B2 | 20080909 | US 2004-871107 | 20040621 <-- |
| | US 20040258826 | A1 | 20041223 | | |
| | US 20030118712 | A1 | 20030626 | US 2001-22372 | 20011220 <-- |
| | US 6884445 | B2 | 20050426 | | |
| | EP 1410722 | A1 | 20040421 | EP 2002-79289 | 20021016 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |
| | US 20030134027 | A1 | 20030717 | US 2002-279968 | 20021025 <-- |
| | US 6989166 | B2 | 20060124 | | |
| | WO 2003053165 | A1 | 20030703 | WO 2002-NL856 | 20021220 <-- |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| PRAI | US 2001-22372 | A | 20011220 | <-- | |
| | EP 2002-77222 | A | 20020607 | <-- | |
| | EP 2002-79289 | A | 20021016 | <-- | |
| | US 2002-279968 | A | 20021025 | <-- | |
| | WO 2002-NL856 | A2 | 20021220 | <-- | |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L10 ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN
 TI Compositions comprising fermentable fiber which are adapted for use by a companion animal and kits and methods of their use
 AB The present disclosure is directed to compns., kits, and methods which are adapted for use (especially oral use) by companion animals, for enhancement of gastrointestinal health. In one embodiment, compns. are provided which comprise a fermentable fiber, wherein the composition is a liquid

AN 2005:474928 HCAPLUS <>LOGINID::20100208>>

DN 143:25818

TI Compositions comprising fermentable fiber which are adapted for use by a companion animal and kits and methods of their use

IN Norton, Sharon Ann; Goldy, Gary Gregory

PA The Iams Company, USA

SO U.S. Pat. Appl. Publ., 10 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|--------------|
| PI | US 20050119222 | A1 | 20050602 | US 2003-725248 | 20031201 <-- |
| | AU 2004295003 | A1 | 20050616 | AU 2004-295003 | 20041201 <-- |
| | AU 2004295003 | B2 | 20081204 | | |
| | CA 2547330 | A1 | 20050616 | CA 2004-2547330 | 20041201 <-- |
| | WO 2005053425 | A1 | 20050616 | WO 2004-US40084 | 20041201 <-- |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, | | | | |

LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
 MR, NE, SN, TD, TG
 EP 1689247 A1 20060816 EP 2004-812571 20041201 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS
 BR 2004017166 A 20070306 BR 2004-17166 20041201 <--
 JP 2007512024 T 20070517 JP 2006-541496 20041201 <--
 PRAI US 2003-725248 A 20031201 <--
 WO 2004-US40084 W 20041201

L10 ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN
 TI Companion animal compositions comprising short-chain oligofructose
 AB Pet feed compns. comprise about 0.01-0.2% short-chain oligofructose (by
 weight of the composition) comprising 1-kestose, nystose, and
 1F- β -fructofuranosylnystose. The compns. are used to enhance the
 gastrointestinal health of the animal and may improve fecal odor.
 AN 2005:471849 HCAPLUS <<LOGINID::20100208>>
 DN 143:6762
 TI Companion animal compositions comprising short-chain oligofructose
 IN Vickers, Robert Jason; Boileau, Thomas William-Maxwell; Sunvold, Gregory
 Dean
 PA The Iams Company, USA
 SO U.S. Pat. Appl. Publ., 7 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|--------------|
| PI | US 20050118299 | A1 | 20050602 | US 2003-725251 | 20031201 <-- |
| | AU 2004295004 | A1 | 20050616 | AU 2004-295004 | 20041201 <-- |
| | AU 2004295004 | B2 | 20081009 | | |
| | CA 2547332 | A1 | 20050616 | CA 2004-2547332 | 20041201 <-- |
| | WO 2005053427 | A1 | 20050616 | WO 2004-US40085 | 20041201 <-- |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | EP 1689248 | A1 | 20060816 | EP 2004-812572 | 20041201 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS | | | | |
| | BR 2004017167 | A | 20070306 | BR 2004-17167 | 20041201 <-- |
| | JP 2007512840 | T | 20070524 | JP 2006-542681 | 20041201 <-- |
| PRAI | US 2003-725251 | A | 20031201 | <-- | |
| | WO 2004-US40085 | W | 20041201 | | |

L10 ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN
 TI Methods and kits related to administration of a fructooligosaccharide

AB A first embodiment disclosed herein is a method of enhancing total tract digestibility of one or more dietary components in a companion animal, the method comprising administering to the companion animal a companion animal composition comprising fructooligosaccharide. Kits comprising the companion animal composition and information that use of the companion animal composition by a companion animal is useful for enhancing total tract digestibility of one or more dietary components in the companion animal, are also disclosed. In a related, but sep., embodiment, a method selected from enhancing calcium absorption, improving bone health, improving strength, improving phys. activity performance, and combinations thereof, the method comprising administering to a companion animal a companion animal composition comprising fructooligosaccharide, is disclosed. Kits comprising the companion animal composition and information that use of the companion animal composition by a companion animal is useful for a purpose selected from the group consisting of enhancing calcium absorption, improving bone health, improving strength, improving phys. activity performance, and combinations thereof, are also disclosed.

AN 2005:471837 HCPLUS <<LOGINID::20100208>>

DN 143:13251

TI Methods and kits related to administration of a fructooligosaccharide

IN Sunvold, Gregory Dean; Boileau, Thomas William-Maxwell; Vickers, Robert Jason

PA The Iams Company, USA

SO U.S. Pat. Appl. Publ., 8 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|--------------|
| PI | US 20050118234 | A1 | 20050602 | US 2003-724839 | 20031201 <-- |
| | AU 2004295005 | A1 | 20050616 | AU 2004-295005 | 20041201 <-- |
| | CA 2547059 | A1 | 20050616 | CA 2004-2547059 | 20041201 <-- |
| | WO 2005053426 | A1 | 20050616 | WO 2004-US40086 | 20041201 <-- |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | EP 1696734 | A1 | 20060906 | EP 2004-812573 | 20041201 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS | | | | |
| | BR 2004017187 | A | 20070306 | BR 2004-17187 | 20041201 <-- |
| | JP 2007512032 | T | 20070517 | JP 2006-542682 | 20041201 <-- |
| | AU 2008229785 | A1 | 20081030 | AU 2008-229785 | 20081003 <-- |
| PRAI | US 2003-724839 | A | 20031201 | <-- | |
| | AU 2004-295005 | A3 | 20041201 | | |
| | WO 2004-US40086 | W | 20041201 | | |

L10 ANSWER 5 OF 20 HCPLUS COPYRIGHT 2010 ACS on STN

TI Mucosal immunity-stimulating compositions and foods containing fructooligosaccharides

AB The compns. useful for infant formula, health foods, dietary supplements, and foods for the elderly or patients, contain fructooligosaccharides, glucosyl-(1→2)-(fructosyl)n-β-

(2→1)-fructose ($n = 1-3$). The compns. enhance the production of polymeric Ig receptors and antigen-specific secretory IgA and protect against infection. Weanling mice were fed with feed containing 5 weight% Meioligo P (mixture containing 1-kestose, nystose, and 1F- β -fructofuranosylnystose; purity $\geq 95\%$) for 27-28 days. The amts. of IgA antibodies produced in the mice were 1.3 mg/day in the feces, 2.8 μ g/mg-dry-wt. in the Peyer's patch lymphocytes, and 302 μ g/large-intestine, while those in controls fed without fructooligosaccharides were 0.3 mg/day, 1.1 μ g/mg-dry-weight, and 173 μ g, resp.

AN 2003:550191 HCAPLUS <<LOGINID::20100208>>

DN 139:100279

TI Mucosal immunity-stimulating compositions and foods containing fructooligosaccharides

IN Nakamura, Yoshitaka; Nagafuchi, Shinya; Takahashi, Takeshi

PA Meiji Milk Products, Co., Ltd., Japan

SO Jpn. Kokai Tokyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------|------|----------|-----------------|--------------|
| ----- | ---- | ----- | ----- | ----- |
| PI JP 2003201239 | A | 20030718 | JP 2002-81842 | 20020322 <-- |
| PRAI JP 2001-339956 | A | 20011105 | <-- | |

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L10 ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Effect of food-processing on the degradation of fructooligosaccharides in fruit

AB The effect of process on fructooligosaccharide degradation in stewed apple-banana and 3 apple dessert was studied. 1-Kestose was analyzed using an accurate anal. method for carbohydrate determination (high-performance anion exchange chromatog. with pulsed amperometric detection, HPAEC-PAD). It appears that the content of 1-kestose in raw material was much higher than in the finished product. Furthermore, a banana puree incubated for 30 min over a temperature range (80-110°C), supposed to favor degradation, appeared stable. This indicate that its the formulation rather than cooking or pasteurization which is responsible for the fructooligosaccharide loss.

AN 2003:535112 HCAPLUS <<LOGINID::20100208>>

DN 139:260176

TI Effect of food-processing on the degradation of fructooligosaccharides in fruit

AU L'homme, C.; Puigserver, A.; Biagini, A.

CS Institut Mediterraneen de Recherche en Nutrition, Universite Aix-Marseille III-INRA, Marseille, 13397, Fr.

SO Food Chemistry (2003), 82(4), 533-537

CODEN: FOCHDJ; ISSN: 0308-8146

PB Elsevier Science

DT Journal

LA English

OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Fructan content of rye and rye products

AB The fructan content of Finnish rye grains (13 samples, seven cultivars, harvested in 1998-2000) varied at 4.6-6.6 g/100 g (db). Com. whole grain rye flour and rye flakes had fructan content of 4 g/100 g, light refined

rye flour had fructan content of 3 g/100 g, and rye bran had fructan content of 7 g/100 g. Fructan content as high as 23 g/100 g was detected in the water-extractable concentrate of rye bran. Finnish soft rye bread and rye crisp bread contained 2-3 g of fructan/100 g. According to the suggested new definition of dietary fiber, fructans are also classified as dietary fiber. This means that the dietary fiber content of some cereal foods such as rye products may be increased by as much as 20% due to the presence of fructans in the grain.

AN 2003:237859 HCAPLUS <<LOGINID::20100208>>
 DN 138:320194
 TI Fructan content of rye and rye products
 AU Karppinen, S.; Myllymaki, O.; Forssell, P.; Poutanen, K.
 CS VTT Biotechnology, VTT, FIN-02044, Finland
 SO Cereal Chemistry (2003), 80(2), 168-171
 CODEN: CECHAF; ISSN: 0009-0352
 PB American Association of Cereal Chemists
 DT Journal
 LA English
 OSC.G 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
 RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN
 TI Beverage with storage-stable prebiotic difructose dianhydride III
 dietary fiber additive
 AB The invention relates to a beverage in which difructose dianhydride III is added as prebiotic dietary fiber, wherein the DFA III shows, even at a pH value of < 3.9, sufficient storage stability during the entire shelf life of the beverage.
 AN 2003:202394 HCAPLUS <<LOGINID::20100208>>
 DN 138:220691
 TI Beverage with storage-stable prebiotic difructose dianhydride III
 dietary fiber additive
 IN Stoppok, Eberhard; Walter, Martin; Wullbrandt, Dieter
 PA Nordzucker A.-G., Germany
 SO PCT Int. Appl., 10 pp.
 CODEN: PIXXD2
 DT Patent
 LA German
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|------------------|--------------|
| PI | WO 2003020054 | A2 | 20030313 | WO 2002-EP9632 | 20020829 <-- |
| | WO 2003020054 | A3 | 20071129 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, AP, EA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, EP, OA | | | | |
| | DE 10142433 | A1 | 20030403 | DE 2001-10142433 | 20010831 <-- |
| | CA 2455634 | A1 | 20030313 | CA 2002-2455634 | 20020829 <-- |
| | AU 2002333741 | A1 | 20030318 | AU 2002-333741 | 20020829 <-- |
| | JP 2005510210 | T | 20050421 | JP 2003-524376 | 20020829 <-- |
| | EP 1585393 | A2 | 20051019 | EP 2002-797641 | 20020829 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |

IE, FI, CY, TR, BG, CZ, EE, SK
US 20040194630 A1 20041007 US 2004-487562 20040224 <--
PRAI DE 2001-10142433 A 20010831 <--
WO 2002-EP9632 W 20020829 <--
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L10 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Detection of oligosaccharides in sugar products using planar chromatography
AB Oligosaccharides, and in particular raffinose and kestoses, are of great importance not only in the field of cane and beet processing but also in respect of the analyses of a number of agricultural raw materials and trade products. The authors judge it to be useful to have at one's disposal a simple and reliable anal. technique to be used for the detection of oligosaccharides in different materials. Modern planar chromatog. can be utilized, bearing in mind that HPTLC (high performance thin layer chromatog.) plates, Automated Multiple Development, completely automated elution systems, sample positioning and spots detection apparatuses, are available. Details on the anal. methodol. adopted for molasses and other sugar products are presented and discussed also giving statistical data about its accuracy and precision. Some examples of practical application of the proposed methodol. are described.
AN 2001:426224 HCAPLUS <<LOGINID::20100208>>
DN 135:194587
TI Detection of oligosaccharides in sugar products using planar chromatography
AU Vaccari, G.; Lodi, G.; Tamburini, E.; Bernardi, T.; Tosi, S.
CS Chemistry Department, University of Ferrara, Ferrara, 44100, Italy
SO Food Chemistry (2001), 74(1), 99-110
CODEN: FOCHDJ; ISSN: 0308-8146
PB Elsevier Science Ltd.
DT Journal
LA English
OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Ion Chromatographic Determination of Three Fructooligosaccharide Oligomers in Prepared and Preserved Foods
AB Fructooligosaccharides (FOS) are short-chain sugars that occur naturally and have dietary benefits for humans. They are widely distributed in nature and are a natural part of the human diet. The objective of this study was to determine the concns. of 1-kestose (GF2), nystose (GF3), and 1F-β-fructofuranosylnystose (GF4) in a variety of common processed and prepared foods. An ion chromatog. method was developed for this purpose in which the sugar concns. were measured using integrated amperometry. The samples were simply prepared by blending with water and filtering the suspensions through a 10000 Da cutoff centrifugal filter. These samples were then injected into the ion chromatograph, which had been programmed for gradient elution, and the areas of the sugar peaks obtained compared to those of standard sugars on a calibration curve. Selected samples were prepared both with and without standard spikes to assess the efficiency of the determination. Of the vegetables investigated, artichokes contained by far the most FOS, followed by onions; bananas contained more FOS than other fruits investigated. The method was shown to be simple, convenient, and relatively fast for the quantitation of FOS in processed and prepared food products.
AN 2000:679053 HCAPLUS <<LOGINID::20100208>>
DN 133:349304
TI Ion Chromatographic Determination of Three Fructooligosaccharide Oligomers

in Prepared and Preserved Foods
AU Hogarth, A. J. C. L.; Hunter, Diane E.; Jacobs, Wesley A.; Garleb, Keith A.; Wolf, Bryan W.
CS Ross Products Division, Abbott Laboratories, Columbus, OH, 43215, USA
SO Journal of Agricultural and Food Chemistry (2000), 48(11),
5326-5330
CODEN: JAFCAU; ISSN: 0021-8561
PB American Chemical Society
DT Journal
LA English
OSC.G 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)
RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Analysis of Food Oligosaccharides Using MALDI-MS: Quantification
of Fructooligosaccharides
AB Matrix-assisted laser desorption/ionization mass spectrometry (MALDI-MS)
is a powerful new technique that will have a great impact on food
anal. This study demonstrates the applicability of MALDI-MS performed
directly on an aqueous food extract for qual. and quant. anal. of
food oligosaccharides. 2',4',6'-Trihydroxyacetophenone was the
best matrix for anal. of oligosaccharides in the foods examined. The
relationship between laser strength, resolution, and the response factors of
individual oligosaccharides using MALDI-MS was investigated. A MALDI-MS
method for quant. anal. of fructooligosaccharides with standard addition of a
pure fructooligosaccharide was developed. High performance anion exchange
chromatog. with pulsed amperometric detection was compared to MALDI-MS for
the anal. of fructooligosaccharides. The fructooligosaccharide analyses
were performed on red onions, shallots, and elephant garlic.
AN 1999:157524 HCAPLUS <>LOGINID::20100208>>
DN 130:324438
TI Analysis of Food Oligosaccharides Using MALDI-MS: Quantification
of Fructooligosaccharides
AU Wang, Jian; Sporns, Peter; Low, Nicholas H.
CS Department of Agricultural Food and Nutritional Science, University of
Alberta, Edmonton, AB, T6G 2P5, Can.
SO Journal of Agricultural and Food Chemistry (1999), 47(4),
1549-1557
CODEN: JAFCAU; ISSN: 0021-8561
PB American Chemical Society
DT Journal
LA English
OSC.G 45 THERE ARE 45 CAPLUS RECORDS THAT CITE THIS RECORD (45 CITINGS)
RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Determination of fructooligosaccharides in raw materials and finished
products by HPAE-PAD
AB Fructooligosaccharides (FOS) are food grade non-digestible
carbohydrates that exert beneficial nutritional effects. During the past
few years, they have been intensively commercialized in a large variety of
food products. Therefore, their characterization and
quantification is required for food-labeling purposes. This
article describes the suitability of high performance anion exchange
chromatog. coupled with pulsed amperometric detection (HPAE-PAD) for the
characterization and determination of FOS. Using an optimized separation
method, FOS
to a d.p. of 8, together with fructose, glucose, lactose, sucrose,
maltose, and malto-n-ose (n = 3 to 7), were completely separated in a single

50-min run. FOS were identified and quantified in five com. preps. and 20 com. foods. Results were consistent with the composition indicated on the labels. The method is simple, sensitive, and reproducible. Detection limits were in the range 1.5-4.0 mg/L for all sugars of interest. Repeatability and repeatability relative standard deviation were 0.02% and 2.31%, resp. The recovery of FOS preps. in various foods ranged from 95% to 108%.

AN 1997:748774 HCPLUS <<LOGINID::20100208>>
DN 128:33876
OREF 128:6669a,6672a
TI Determination of fructooligosaccharides in raw materials and finished products by HPAE-PAD
AU Marc Durnnat, Jean; Martinez, Cristina
CS Quality & Safety Assurance Department, Nestec Ltd., Nestle Research Centre, Lausanne, CH-1000/26, Switz.
SO Seminars in Food Analysis (1997), 2(1/2), 85-97
CODEN: SFANF7; ISSN: 1084-2071
PB Chapman & Hall
DT Journal
LA English

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 13 OF 20 HCPLUS COPYRIGHT 2010 ACS on STN
TI Selected Fructooligosaccharide (1-Kestose, Nystose, and 1F- β -Fructofuranosylnystose) Composition of Foods and Feeds
AB Fructooligosaccharides (FOS) are naturally occurring sugars with potentially beneficial nutritional effects. They are widely distributed throughout the plant kingdom. An ion chromatog. method was developed to rapidly and accurately measure FOS in selected food and feed ingredients ingested by humans and animals. The objective of this study was to determine the 1-kestose (1-kestotriose; GF2), nystose (1,1-kestotetraose; GF3), and 1F- β -fructofuranosylnystose (1,1,1-kestopentaose; GF4) content of a wide variety of foods and feedstuffs. After extraction with water and appropriate filtration, samples were chromatographed, using an alkaline sodium acetate gradient, through an ion exchange column and guard fitted to a Dionex chromatog. unit equipped with a pulsed electrochem. detector. All samples were prepared both with and without spikes of stds. to verify recovery and peak identification. Samples of the Compositae family were highest in total FOS followed by Allium species of the Amaryllidaceae family. The method provided excellent separation, recovery, and quantification of the GF_n units of FOS. Accurate quantitation of FOS will allow more precise nutritional formulations to be developed with respect to inclusion of this functional food component in human and animal diets.

AN 1997:547218 HCPLUS <<LOGINID::20100208>>
DN 127:134828
OREF 127:26001a,26004a
TI Selected Fructooligosaccharide (1-Kestose, Nystose, and 1F- β -Fructofuranosylnystose) Composition of Foods and Feeds
AU Campbell, Joy M.; Bauer, Laura L.; Fahey, George C. ,Jr.; Hogarth, A. J. C. L.; Wolf, Bryan W.
CS Department of Animal Sciences and Division of Nutritional Sciences, University of Illinois, Urbana, 61801, USA
SO Journal of Agricultural and Food Chemistry (1997), 45(8), 3076-3082
CODEN: JAFCAU; ISSN: 0021-8561
PB American Chemical Society
DT Journal
LA English

OSC.G 51 THERE ARE 51 CAPLUS RECORDS THAT CITE THIS RECORD (51 CITINGS)

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Use of indigestible oligosaccharides to prevent and treat diarrhea
AB A method is provided for reducing the duration of diarrhea and recurrent episodes of diarrhea in humans by enterally administering indigestible oligosaccharides prophylactically. More specifically, the present invention relates to a method using indigestible oligosaccharides or fructooligosaccharides (FOS) to reduce the duration and recurrence of diarrhea in a human wherein between 0.5 g and 5 g or at least one FOS selected from the group consisting of 1-ketose, nystose, and fF- β -fructofuranosyl nystose is administered to said human per day. The indigestible oligosaccharides can be produced through enzymic synthesis, chemical techniques or isolated from plant materials and are administered in the form of a nutritional product, candy, tablets, chewing gum, lozenges, milk, yogurts, fermented products and the like. A FOS powder contained glucose and fructose 0.5 sucrose 3.5, fructooligosaccharide 96.0, GF2 41.3, GF3 45.7 and GF4 9.0%. A milk-based beverage was supplemented with 3.5 g/L of above FOS and was fed to children 10-24 mo of age for a period of 16 wk. The number of children having diarrhea and mean duration in days were 43, and 3.91 as compared with 56 and 4.88, resp., for the controls.

AN 1997:205160 HCAPLUS <<LOGINID::20100208>>

DN 126:203722

OREF 126:39307a,39310a

TI Use of indigestible oligosaccharides to prevent and treat diarrhea

IN Dohnalek, Margaret Ione Halpin; Ostrom, Karin Margaret; Hilty, Milo Duane

PA Abbott Laboratories, USA

SO PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|--------------|
| PI | WO 9702829 | A2 | 19970130 | WO 1996-US11201 | 19960702 <-- |
| | WO 9702829 | A3 | 19970327 | | |
| | W: AU, BR, CA, IL, JP, MX, NO, NZ RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | US 5827526 | A | 19981027 | US 1996-653084 | 19960612 <-- |
| | CA 2226422 | A1 | 19970130 | CA 1996-2226422 | 19960702 <-- |
| | CA 2226422 | C | 20030617 | | |
| | AU 9663447 | A | 19970210 | AU 1996-63447 | 19960702 <-- |
| | AU 723942 | B2 | 20000907 | | |
| | EP 837685 | A2 | 19980429 | EP 1996-922639 | 19960702 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI | | | | |
| | NZ 312019 | A | 20000623 | NZ 1996-312019 | 19960702 <-- |
| | JP 2002502356 | T | 20020122 | JP 1997-505867 | 19960702 <-- |
| | IL 123131 | A | 20050831 | IL 1996-123131 | 19960702 <-- |
| | ZA 9605904 | A | 19970129 | ZA 1996-5904 | 19960711 <-- |
| | NO 9800083 | A | 19980310 | NO 1998-83 | 19980108 <-- |
| | NO 314242 | B1 | 20030224 | | |
| PRAI | US 1995-1036P | P | 19950711 | <-- | |
| | US 1996-653084 | A | 19960612 | <-- | |
| | WO 1996-US11201 | W | 19960702 | <-- | |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OSC.G 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Use of indigestible oligosaccharides to treat and prevent otitis media in humans

AB A method is provided for reducing the incidence of otitis media in infants and young children comprising administering to human and indigestible oligosaccharide selected from the group consisting of fructooligosaccharides, fructosans, xylooligosaccharides and galactooligosaccharides. The indigestible oligosaccharides can be produced through enzymic synthesis, chemical techniques or isolated from plant materials and are administered in the form of a nutritional produce, candy, tablets, chewing gums, lozenges, milk products, yogurt and the like. In a preferred embodiment of this invention, the indigestible oligosaccharides have a d.p. of 2-20 and still more preferably are the fructooligosaccharides GF2, GF3 and GF4. A fructooligosaccharide powder contained glucose and fructose 0.5 sucrose 3.5, fructooligosaccharide 96.0, GF2 41.3, GF3 45.7 and GF4 9.0%. A milk-based beverage was supplemented with 3.5 g/L of above fructooligosaccharide and was fed to children 10-24 mo of age for a period of 16 wk. The number of children having otitis media were 26 as compared with 51 for the controls.

AN 1997:205159 HCAPLUS <<LOGINID::20100208>>

DN 126:203721

OREF 126:39307a,39310a

TI Use of indigestible oligosaccharides to treat and prevent otitis media in humans

IN Dohnalek, Margaret Ione Halpin; Ostrom, Karin Margaret; Hilty, Milo Duane

PA Abbott Laboratories, USA

SO PCT Int. Appl., 16 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|--------------|
| PI | WO 9702830 | A2 | 19970130 | WO 1996-US11243 | 19960702 <-- |
| | WO 9702830 | A3 | 19970410 | | |
| | W: AU, BR, CA, IL, JP, MX, NO, NZ RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | US 5849324 | A | 19981215 | US 1996-653083 | 19960612 <-- |
| | ZA 9605619 | A | 19970124 | ZA 1996-5619 | 19960702 <-- |
| | CA 2226420 | A1 | 19970130 | CA 1996-2226420 | 19960702 <-- |
| | AU 9663452 | A | 19970210 | AU 1996-63452 | 19960702 <-- |
| | AU 719547 | B2 | 20000511 | | |
| | EP 837686 | A2 | 19980429 | EP 1996-922652 | 19960702 <-- |
| | EP 837686 | B1 | 20021009 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI | | | | |
| | BR 9609619 | A | 19990406 | BR 1996-9619 | 19960702 <-- |
| | NZ 312022 | A | 20000623 | NZ 1996-312022 | 19960702 <-- |
| | JP 2002502357 | T | 20020122 | JP 1997-505879 | 19960702 <-- |
| | AT 225662 | T | 20021015 | AT 1996-922652 | 19960702 <-- |
| | EP 1254664 | A2 | 20021106 | EP 2002-15505 | 19960702 <-- |
| | EP 1254664 | A3 | 20040102 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI | | | | |
| | PT 837686 | E | 20030228 | PT 1996-922652 | 19960702 <-- |
| | ES 2186788 | T3 | 20030516 | ES 1996-922652 | 19960702 <-- |
| | NO 9800071 | A | 19980107 | NO 1998-71 | 19980107 <-- |
| PRAI | US 1995-1000P | P | 19950710 | <-- | |
| | US 1996-653083 | A | 19960612 | <-- | |
| | US 1995-1000 | P | 19950710 | <-- | |
| | EP 1996-922652 | A3 | 19960702 | <-- | |
| | WO 1996-US11243 | W | 19960702 | <-- | |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L10 ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Determination of oligosaccharides in foods for specified health use by HPLC
- AB A simple and rapid determination method was developed for oligosaccharides in foods; lactosylfructoside (= lactosucrose), soy-oligosaccharides, fructooligosaccharides, palatinose, maltitol and xylotriose. Milk was deproteinized with 1.8% trichloroacetic acid and then defatted with di-Et ether. Youkan or gum was cut into small pieces, then warm water was added and the mixture was ultrasonicated. Oligosaccharides were extracted with 50% EtOH and the solution was filtered. The oligosaccharides were analyzed by normal-phase HPLC [column, TSKgel Amide-80 (4.6 mm i.d. + 250 mm); mobile phase, MeCN-water (70:30); detection, differential refractometer]. Contents of oligosaccharides in 6 com. oligosaccharides for foodstuffs and 7 com. foods, mainly Foods for Specified Health Use (functional foods) were determined by the proposed method. The content of oligosaccharide was consistent with the indicated content in all cases. Recoveries of the oligosaccharides from foods were in the range of 95.0-118%. The detection limit of the oligosaccharides was 0.2 mg/mL for juice, 0.5 mg/g for milk, and 1 mg/g for youkan and gum.
- AN 1996:181943 HCAPLUS <<LOGINID::20100208>>
- DN 124:341144
- OREF 124:63365a, 63368a
- TI Determination of oligosaccharides in foods for specified health use by HPLC
- AU Yasui, Teruyo; Toda, Chitose; Nagano, Hideo; Ishihara, Hideko
- CS Fac. Pharm., Meijo Univ., Nagoya, 468, Japan
- SO Shokuhin Eiseigaku Zasshi (1996), 37(1), 29-37
- CODEN: SKEZAP; ISSN: 0015-6426
- DT Journal
- LA Japanese
- L10 ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Recent developments in commercial ion-exchange separation technology for 90% fructooligosaccharides
- AB Fructooligosaccharides (FOS) are naturally occurring sugars that can have beneficial effects as food ingredients. FOS are resistant to digestion by mammalian α -amylase, sucrase, and maltase. They are therefore nondigestible by humans but can be utilized by some Gram-pos. organisms, such as bifidobacteria. FOS are utilized by bifidobacteria from the human intestinal tract in vitro. Therefore, there will be an increasing demand for FOS in the health-food market. A process for producing a high-FOS syrup containing more than 90% FOS has been developed that involves an ion-exchange separation. The authors investigated many organic ion-exchange resins and two inorg. compds. as packing materials for separation. The most effective ion-exchange resin (TSCP5) was selected for packing separation columns. Ten in-series connected identical jacketed columns (140 cm + 5.5 cm i.d., column volume 3.3 L) were packed with TSCP5 resin and kept at 60°. By first feeding about 2 kg TSC Oligo syrup (52BX), then eluting the components with hot deionized water at flow rates of 2.5 h/0.5 bed volume (BV) followed by 1.5 h/0.5 BV, a 90% FOS solution was obtained with an 85% recovery.
- AN 1995:672608 HCAPLUS <<LOGINID::20100208>>
- DN 123:226345
- OREF 123:40415a, 40418a
- TI Recent developments in commercial ion-exchange separation technology for 90% fructooligosaccharides
- AU Yang, John P.; Huang, S. L.; Wang, L. H.; Liu, Y. T.

CS Dep. of Biotechnology, Taiwan Sugar Res. Inst., Tainan, Taiwan
 SO Taiwan Tangye Yanjiuso Yanjiu Huibao (1994), 146, 33-43
 CODEN: TTYYBR; ISSN: 0372-2414
 PB Taiwan Sugar Research Institute
 DT Journal
 LA Chinese

L10 ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN
 TI Feed containing fructooligosaccharides for reducing mortality and air sac lesions and for enhancing breast-to-body weight ratio in poultry
 AB Poultry are fed compns. containing fructooligosaccharides, e.g. sucrose with 1-8 fructose residues attached. This enhances breast weight to body weight ratios and decreases mortality and air sac lesions. Chicks were given food containing Neosugar G (glucose and sucrose 43-50, 1-kestose 20-30, nystose 20-30, and 1-fructofuranosylmystone 2-8%) for 47 days. Those chickens which received feed containing 0.375% Neosugar G had an average body weight of 2.205 kg, 18.72% of which was breast weight. The value for controls was 2.037 and 17.49, resp. The mortality rate for chickens which had received 0.75% Neosugar G was 5.31%; for those receiving no Neosugar G, 7.67%. Similar feeding regimens decreased the air sac lesion score from 2.29-2.44 (no Neosugar G) to 1.54.

AN 1990:551256 HCAPLUS <<LOGINID::20100208>>
 DN 113:151256
 OREF 113:25705a
 TI Feed containing fructooligosaccharides for reducing mortality and air sac lesions and for enhancing breast-to-body weight ratio in poultry
 IN Quarles, Carey L.
 PA Coors Biotech, Inc., USA
 SO U.S., 6 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|--------------|----------------------------------|-----------------------------------|------------------------------|
| PI | US 4927811 CA 2002712 CA 2002712 | A A1 C | 19900522 19900515 19971014 | US 1988-271931 CA 1989-2002712 | 19881115 <-- 19891110 <-- |
| PRAI | US 1988-271931 | A | 19881115 | <-- | |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
 OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
 RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN
 TI Quantitative analysis of fructooligosaccharides by gas-liquid chromatography and high-performance liquid chromatography
 AB Fructooligosaccharides were separated by gas chromatog. on a 5% OV-101 column after trimethylsilylation or by high-performance liquid chromatog. on a Nucleosil 5NH₂ column with MeCN-water (65:35) as the mobile phase. Sucrose [57-50-1], 1-kestose [470-69-9], nystose [13133-07-8], and fructonystose [59432-60-9] were well separated by either method. In some mixts. of oligosaccharides, however, gas chromatog. was more efficient than liquid chromatog. in separating some of the components.

AN 1984:137495 HCAPLUS <<LOGINID::20100208>>
 DN 100:137495
 OREF 100:20961a,20964a
 TI Quantitative analysis of fructooligosaccharides by gas-liquid chromatography and high-performance liquid chromatography
 AU Hagiwara, Kiyokazu; Tsuda, Akiko; Ichikawa, Tomio; Kanaya, Kenichiro;

Yoneyama, Satoshi; Suda, Hiroyuki; Iwao, Hiroyuki
CS Div. Appl. Food Res., Natl. Inst. Nutr., Tokyo, 162, Japan
SO Shokuhin Eiseigaku Zasshi (1983), 24(6), 558-62
CODEN: SKEZAP; ISSN: 0015-6426
DT Journal
LA Japanese
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L10 ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Low-calorie sweetener
AB sucrose [57-50-1] Is reacted with an Aspergillus transferase enzyme to form derivs. in which fructosyl residues are attached to sucrose mols. These derivs. may be used as noncarcinogenic, low-cal sweetening agents. Thus, Aspergillus niger culture fluid was concentrated by ultrafiltration to a transferase activity of 240 units/mL. Ten kg sucrose in 6.7 L water was treated with the concentrate at 48 units/g sucrose and held 72 h at 50°. The products consisted of glucose 33, fructose 4, sucrose 10, 1-kestose [470-69-9] 29, nystose [13133-07-8] 20, and 1F-fructofuranosylnystose [59432-60-9] 4%. The latter 3 compds. were used as sweetening agents for food and chewing gum.

AN 1983:177834 HCAPLUS <<LOGINID::20100208>>
DN 98:177834
OREF 98:27013a, 27016a
TI Low-calorie sweetener
IN Adachi, Takashi; Niizato, Tetsutaro; Hidaka, Hidemasa; Takeda, Ueto
PA Meiji Seika Kaisha, Ltd., Japan
SO Ger. Offen., 18 pp.
CODEN: GWXXBX

DT Patent
LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|-----------------|--------------|
| PI | DE 3232531 | A1 | 19830317 | DE 1982-3232531 | 19820901 <-- |
| | DE 3232531 | C2 | 19950713 | | |
| | JP 58040065 | A | 19830308 | JP 1981-136130 | 19810901 <-- |
| | GB 2105338 | A | 19830323 | GB 1982-24919 | 19820901 <-- |

PRAI JP 1981-136130 A 19810901 <--
OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT